WHAT IS CLAIMED IS:

1. A method for identifying a flow of data between a source and a destination in a network, said method comprising the steps of:

identifying a plurality of packets at a first point and a second point in the network;

comparing a source address of each packet identified at the second point with one or more source addresses of packets identified at the first point; and

if one of the compared source addresses matches, identifying a destination address of the corresponding packet identified at the second point, and associating the identified destination address and the matching source address to a flow between the source and destination.

2. A method for identifying a flow of data between a source and a destination in a network, said method comprising the steps of:

identifying a plurality of packets at a first point and a second point in the network;

comparing a destination address of each packet identified at the first point with one or more destination addresses of packets identified at the second point; and

if one of the compared destination addresses matches, identifying a source address of the corresponding packet identified at the first point, and associating the identified source address and the matching destination address to a flow between the source and destination.

3. The method of claim 2, wherein the step of identifying a plurality of packets at the second point further comprises the steps of:

generating a compressed address group based on the destination address of each packet identified at the second point.

4. The method of claim 3, wherein generating the compressed address group comprises:

identifying network addresses based on the destination addresses identified at the second point;

classifying each identified network address based on a range of bits in the identified network addresses.

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5.   The method of claim 3, wherein generating the compressed address group comprises:

identifying network addresses for the packets identified at the second point;

if the identified network addresses of two of the packets identified at the second point differ by a least significant bit, then generating a compressed address by combining the identified network addresses of the two packets.

6.   The method of claim 3, wherein generating the compressed address group comprises:

identifying network addresses based on the destination address identified at the second point;

classifying each identified network address based on a range of bits in the identified network addresses; and

if the identified network addresses of two of the packets identified at the second point differ by a least significant bit, then generating a compressed address by combining the identified network addresses of the two packets, wherein the length of the compressed address is one bit less than the combined network addresses.

7.   The method of claim 2, further comprising the step of:

generating flow information at the first point based on the matched destination address and the identified source address.

8.   The method of claim 7, further comprising the step of:

sending the flow information generated at the first point to the second point.

9.   The method of claim 8, further comprising:

updating the flow information at the first and second point when a new destination address is identified at the second point.

10.   The method of claim 8, further comprising the step of:

updating the flow information at the first and second point when a destination address is purged at the second point after a predetermined time-out period.

11.   A method for determining a direction of a flow of data between a source and a destination in a network, said method comprising the steps of:

identifying a plurality of packets at a first point and a second point in the network;

selecting a time-to-live value from the plurality of packets identified at the first point and at least one of the plurality of packets identified at the second point;

comparing a destination address of each packet identified at the first point with a destination address of one or more packets identified at the second point;

if one of the compared destination addresses matches, then identifying a source address of the corresponding packet identified at the first point, associating the identified source address and the matching destination address to a flow between the source and destination, and comparing the time-to-live value of the packets identified at the first point and the at least one of the plurality of packets identified at the second point corresponding to the flow between the source and the destination to determine the direction of the flow between the source and destination.

12. A method for determining a direction of a flow of data between a source and a destination in a network, said method comprising the steps of:

identifying a plurality of packets at a first point and a second point in the network;

selecting a time-to-live value from at least one of the plurality of packets identified at the first point and at least one of the plurality of packets identified at the second point;

comparing a source address of each packet identified at the second point with a source address of one or more packets identified at the first point;

if one of the compared source addresses matches, then identifying a destination address of the corresponding packet identified at the second point, and associating the identified destination address and the matching source address to a flow between the source and destination, and comparing the time-to-live value of the packets identified at the first point and the at least one of the plurality of packets identified at the second point corresponding to the flow between the source and the destination to determine the direction of the flow between the source and the destination.

13.   A system for identifying a flow of data between a source and a destination in a network, comprising:

a first processor that identifies a destination address of one or more packets flowing through a second point in the network and sends the compressed destination addresses to a first point in the network; and

a second processor that identifies a destination address of a packet flowing through the first point, receives the destination addresses from the first processor, and generates flow information based on a comparison between the destination addresses received from the first processor and the destination addresses of the packet identified at the second processor, wherein the flow information identifies the flow of packets between the first point and the second point.

14.   A system for identifying a flow of data between a source and a destination in a network, comprising:

a first processor that identifies a source address of one or more packets flowing through a first point in the network, and sends the source addresses to a second point in the network; and

a second processor that identifies a source address of a packet flowing through the second point, receives compressed source addresses from the first processor, and generates flow information based on a comparison between the source addresses received from the first processor and the source address of the packet identified at the second processor, wherein the flow information identifies the flow of packets between the first point and the second point.